

CLAIMS

1. An automated warehouse system operated by moving a transfer apparatus along a rack in a warehouse such that a container is stored in, or retrieved from the rack, wherein
5 ID tags are attached to the container and individual articles in the container, and the system comprises: first reading means for reading an ID of the container without pulling the container out of the rack; and second reading means for reading IDs of the individual articles in the container by pulling the container out of the rack.

10 2. The automated warehouse system of claim 1, wherein the transfer apparatus is provided with the first reading means and the second reading means on a side facing the rack, and the articles in the container are scanned by the second reading means while pulling the container out of the rack onto the transfer apparatus for reading the IDs of the individual articles in the container.

15 3. The automated warehouse system of claim 2, further comprising pulling control means for setting a speed of pulling the container at low speed at the time of reading the IDs of the individual articles in the container in comparison with a speed in the case where the IDs of the articles are not read.

20 4. The automated warehouse system of claim 1, wherein the transfer apparatus comprises a stacker crane including: a truck movable in a movement direction in parallel with the rack; a mast provided at the truck; a hoisting frame vertically movable along the mast; and transfer means provided at the hoisting frame and movable in the left-right direction perpendicular to the movement direction in the horizontal plane for transferring the container between the rack and the hoisting frame,
25

the first reading means is provided in at least one of positions near the left and right ends of the hoisting frame on a side facing the rack for reading the ID of the container, and the second reading means is provided in at least one of upper positions near the left and right ends of the hoisting frame such that the container passes under the second reading means by the transfer means, and the articles in the container are scanned by the second reading means for reading the IDs of the individual articles in the container.

5. The automated warehouse system of claim 4, wherein

the rack is provided on at least one of respective left and right sides in the movement

10 direction,

the first reading means is provided on at least one of respective left and right ends of the hoisting frame, and

the second reading means is provided in at least one of upper positions near the respective left and right ends of the hoisting frame.

15

6. The automated warehouse system of claim 5, wherein the ID tags of the container are provided at both ends of the container in the left-right direction based on the state where the container is stocked in the rack.

20

7. The automated warehouse system of claim 4, wherein space for arranging at least two of the containers is provided in the hoisting frame, and the at least two containers can be transferred between the hoisting frame and the rack by the transfer means, and internal transfer means is provided in the hoisting frame for transferring the articles between the at least two containers while reading the IDs of the articles.

25

8. An automated warehouse system operated by moving a transfer apparatus along a

rack in a warehouse such that a container is stored in, or retrieved from the rack, wherein
ID tags are attached to the container and individual articles in the container, and the
system comprises: first reading means for reading an ID of the container without moving into
the rack; and second reading means for reading IDs of the individual articles in the container by
5 moving into the rack.